REMARKS

The Examiner's rejection of claims 1-8 under 35 U.S.C. § 102(e) for being anticipated by the Boroditsky et al. published patent application UA 2002/0071153, as this rejection may be attempted to be applied to amended claims 1-8, is respectfully traversed.

Applicant submits that Examiner's rejection of claims 1-8, is overcome by the present extensive amendment to claim 1 (claim's 2, 5 and 7 having been cancelled). In support of this position, applicant submits hereinbelow further elaboration on the differences between the present claim 1 and Boroditsky et al.

Applicant summarizes Boroditsky's disclosure as follows:

1.   Combines packet switched (TDM) and WDM schemes in a two dimensional multiplexing scheme and employs n*n optical switches.

2.   Employs composite packets generated locally by tunable laser and 'stacked' by passing packets through an array of circulators and delay lines to cause synchronization of packets into timeslots. Each timeslot containing composite packets that may passed through a given switch node or be dropped for further distribution to users connected to the switch node using WDM or other techniques.

3.   Describes how 'Transparent Bypass' may occur where a selected portion of a composite packet may be dropped at a switch node without affecting the remaining portion which passes through the switch node unaltered. This is accomplished by using a fixed add/drop bandwidth allocation scheme that is based on fiber Bragg gratings.

4.   Employs photonic delay lines to achieve 'Time-slot-interchange'.

5.   Employs circulators and optical delay lines to allow composite packets that pass through a node to be merged with composite packets that are generated at the node by a tunable source.

Thus, unlike the present invention, which allows individual wavelengths to be switched independently of each other, the Boroditsky patent disclosure relates exclusively to Photonic Slot Routing wherein composite packets are made up of several fixed length packets that are synchronized in a single timeslot but at different wavelengths.

While Boroditsky et al anticipate a scheme wherein 'Transparent Bypass' may occur to allow selected wavelengths in a composite packet to be dropped without affecting the remaining portion, this selectivity does not constitute 'Individual Wavelength Switching' as is disclosed by the current invention.

Futher, while Boroditsky et al anticipate that the fiber Bragg gratings can be made tunable, they recognize that this will not be possible on a packet by packet basis to allow effective individual switching of wavelengths within a timeslot.

Accordingly, the Boroditsky disclosures are constrained to a particular subset of capabilities inherent in the present invention. By allowing individual wavelengths to be switched independently, the present invention is much more flexible and possesses a finer bandwidth granularity than the Boroditsky disclosures. To illustrate this point, we observe that in the Boroditsky disclosure, all wavelengths in a particular timeslot would be switched together as an integral unit from source to destination; whereas in the present invention, each wavelength in a particular timeslot could be switched to a different destination. Unlike the Boroditsky disclosure, the present invention (for example) could be configured to offer independent granular 50Mbps connections in a network having path rates of 10 Gbps.

In summary, applicant submits that the amended claim 1 is now patentably distinguished over Boroditsky et al, and the now remaining claims 1,3,4,6 and 8 are also now allowable. An early and favourable action to that end is courteously requested.

Respectfully submitted,

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